

Work Order ID 61113

Friday, August 06, 2010 12:37:49 PM



Page 1

Item ID: D205-634-041

Revision ID:

Item Name: Replacement Skidtube

Start Date: 8/6/2010 Start Qty: 1.00

Required Date: 8/20/2010 Req'd Qty: 1.00

Accept



Setup Start



Stop



Cust Item ID:

Customer:

Reference:

Approvals: Process Plan:

Date: 10-8-06 Tooling:

Date:

Run Start



QC:

Date: _____ SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr	Revision Nbr
D2580	Rev D

100



DOCUMENT CONTROL

DC

Document Control

Memo

Photocopy D205-634 bluefile & type labels per PPP D205-634-041 CHG002

K 10-8-06

110



BENDING MACHINE - SKIDTUBES

CNC Bend 1

CNC Delta 100 Bender

0.00

0.00

1-Bend as per program D2580.C on CNC Bender and Folio 16

2-Cut tubes as per Dwg. D2580

3- scribe batch# in aft end of tube

W

Q

WS 10-08-19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 61113

Page 2

Friday, August 06, 2010 12:37:49 PM

Item ID: D205-634-041

Accept



Setup Start



Revision ID:

Item Name: Replacement Skidtube

Stop



Start Date: 8/6/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 8/20/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center ID

120

Operation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

0.00

6 - 8E10/0825

Skidtubes

Memo

0.00

Skidtubes

1- Deburr ends

2- C'sink holes as per dwg without cutting fluid

3- Prepare tube for welding, remove alodine as required.

4- Scribe batch number insied aft end of tube.

130



QC5- Inspect part completeness to step on W/O

0.00

8/10/08/25

QC

Memo

0.00

Quality Control

Q10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 61113

Friday, August 06, 2010 12:37:49 PM



Page 3

Item ID: D205-634-041

Accept



Setup Start



Revision ID:

Item Name: Replacement Skidtube

Stop



Start Date: 8/6/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 8/20/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

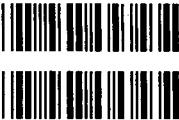
Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

140



Skidtubes

Skidtubes

Memo

0.00

1-Weld step D2576 as per Dwg. D2580 and QSI 004
A/R□□□ Aluminum Rod*1114877 BE 10/08/26*2-Prep per QSI 005 and weld crossbolt spacers D2579 as per Dwg. D2580, QSI
004.For D2579 spacers, weld one side, pass 3/8" drill, weld other side, pass 3/8" drill
A/R□□□ Aluminum Rod*1114877 BE 10/08/26*

3-Grind welds as per Dwg D2580 Grind flush ridge made from bending

4-Drill holes for wearplates using DT 8217 & DT8937 Open holes to 19/64",
adjust stopper not to hit web. Deburr*3 BE 10/08/30*5-Counterbore crossbolt spacers to 7/16" ID x 1.0" deep as per Dwg D2580.
Deburr holes

6-Drill pilot holes for aft cap using DT 8215Open holes to 0.208". Deburr

7-Drill pilot holes for Tow ring using DT8091, open to .640"and Deburr

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 61113

Friday, August 06, 2010 12:37:49 PM



Page 4

Item ID: D205-634-041

Accept



Setup Start



Revision ID:

Item Name: Replacement Skidtube

Stop



Start Date: 8/6/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 8/20/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150



QC

QC10- Inspect visual per QSI004- ground welds

0.00

S 10/06/11

Quality Control

160



QC

QC5- Inspect part completeness to step on W/O

0.00

S 10/06/11

Quality Control

170



HandFinish

Pressure Wash per QSI005 4.3

0.00

0.00

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch and leave fwd cap out of solution.

④

14
14

① BR 10-9-1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 61113

Friday, August 06, 2010 12:37:49 PM



Page 5

Item ID: D205-634-041

Accept



Setup Start



Revision ID:

Item Name: Replacement Skidtube

Stop



Start Date: 8/6/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 8/20/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180



Powdercoat

White Gloss(Ref.4.3.5.1) per QSI005 4.3-Alum

0.00

W 10 09 01 (1)

Powder Coating

Memo

0.00

START TIME:

11:05

OVEN TEMPERATURE:

380

FINISH TIME:

11:35

190



QC

QC3- Inspect Part Finish

0.00

S.10/09/13

Quality Control

0.00

(1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 61113

Friday, August 06, 2010 12:37:49 PM



Page 6

Item ID: D205-634-041

Accept



Setup Start



Revision ID:

Item Name: Replacement Skidtube

Stop



Start Date: 8/6/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 8/20/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

200

Operation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

0.00

7/11 10/09/13

1 d

0.00

HandFinish

Hand Finishing

Memo

1-Install inserts & wearplates & Gaskets as per Dwg. D2580. Use a drop of
Sikaflex on insert holes before installing wearplates✓ A/R Sikaflex-291 M151d Sikaflex expire date: 11/10✓ 2-Coat D2594-3 O' rings with Petroleum Jelly and install on D2594-1 plugs as
per Dwg D2580

✓ 3-Inspect for foreign object per QSI 024

4-Install 2855 Aft Cap as per Dwg D2580 and seal Fwd Step & Aft Cap with
Sikaflex. Clean excess adhesive✓ A/R Sikaflex-291 M1151d Sikaflex expire date: 11/10

5-Wing Walk as per Dwg D2580 and QSI 005 4.4

Batch: M10502Y

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 61113

Friday, August 06, 2010 12:37:49 PM



Page 7

Item ID: D205-634-041

Accept



Setup Start



Revision ID:

Item Name: Replacement Skidtube

Stop



Start Date: 8/6/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 8/20/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

210



QC

QC5- Inspect part completeness to step on W/O

0.00

Sudorli3

Quality Control

Memo

0.00

Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for
Foreign objects per QSI 024

220



Packaging

Packaging

0.00

Memo

0.00

Packaging

Identify and pack for shipping as per PPPD205-634-041

Location: PPP 61112PPP Rev: 6/112

230



QC

QC21- Final Inspection - Work Order Release

0.00

Quality Control

Memo

0.00

MF
10-9-16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Friday, August 06, 2010 12:37:52 PM

Page 1

Work Order ID: 61113



Parent Item: D205-634-041



Parent Item Name: Replacement Skidtube

Start Date: 8/6/2010

Required Date: 8/20/2010

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:N 02.08.28 FP was QC5 in Step 27; Added QC5 to Step 30 KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2580-1



Manufactured

No

110

Each

4.0000



8/6/19 1 mrs 10-08-19

205 Skidtube bent detail

Location	Loc Qty	Loc Code
LG	1	
57028	1	
ST046	3	
59856	2	
59913	1	

D2576-3



Manufactured

No

140

Each

84.0000



1 8/6/10/08/26

Step (machining detail)

Location	Loc Qty	Loc Code
LG	84	
46661	36	
52215	48	

D2579



Manufactured

No

140

Each

327.0000



20

Crossbolt Spacer

Location	Loc Qty	Loc Code
LG	327	
57052	5	
57348	4	
58433	2	
59113	182	
60845	134	

20 8/6/10/08/26

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Friday, August 06, 2010 12:37:52 PM

Page 2

Work Order ID: 61113



Parent Item: D205-634-041



Parent Item Name: Replacement Skidtube

Start Date: 8/6/2010

Required Date: 8/20/2010

Start Qty: 1.00

Required Qty: 1.00

D2855



Manufactured

No

200

Each

81.0000

1

1



M 10109108

Cap

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP6	1	
56613	1	
ST026	80	
50513	1	
50770	28	
51539	2	
53791	49	

AN3-5A



Purchased

No

200

Each

1,542.000

2



M 10109108

Bolt

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST350	1542	
105057	542	
115016	500	
115371	500	

AN960JD10L



NAS1149D0332J Purchased

No

200

Each

2,633.000

2



M 10109108

Washer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST348	2633	
110985	2633	

M 10109108

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Friday, August 06, 2010 12:37:52 PM

Page 3

Work Order ID: 61113



Parent Item: D205-634-041



Parent Item Name: Replacement Skidtube

Start Date: 8/6/2010

Required Date: 8/20/2010

Start Qty: 1.00

Required Qty: 1.00

ALS7-1032-130



Purchased

No

200

Each

878.0000

50

50



HL 10109108

Insert

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP	861	M114723
115079	861	

X50

ST282	17	
113238	17	

AN3C4A



Purchased

No

200

Each

1,889.000

50

50



HL 10109108

BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST350	1889	

X50

114108	14	M1154138
114416	12	
114523	2	
114941	861	
115300	1000	

AN960C10L



NAS1149C0332
R

Purchased

No

200

Each

29.0000

50

50



HL 10109108

washer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST245	29	
107534	29	

X50

M115000

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Friday, August 06, 2010 12:37:53 PM

Page 4

Work Order ID: 61113



Parent Item: D205-634-041



Parent Item Name: Replacement Skidtube

Start Date: 8/6/2010

Required Date: 8/20/2010

Start Qty: 1.00

Required Qty: 1.00

D3566-13



Gasket

Manufactured

No

200

Each

33.0000

1

1



41 10109113

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP	2	
53461	2	
FP012	31	
59661	23	
60209	8	

D3566-5



Gasket

Manufactured

No

200

Each

36.0000

1

1



41 10109113

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP	22	
60869	22	
FP015	14	
59158	14	

D3566-1



Gasket

Manufactured

No

200

Each

30.0000

2

2



41 10109113

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP	13	
60857	13	
FP015	17	
57715	2	
59126	3	
60202	12	

B61656

X2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Friday, August 06, 2010 12:37:53 PM

Page 5

Work Order ID: 61113



Parent Item: D205-634-041



Parent Item Name: Replacement Skidtube

Start Date: 8/6/2010

Required Date: 8/20/2010

Start Qty: 1.00

Required Qty: 1.00

D3564-11



Manufactured No

200

Each

8.0000

1

1

Wearshoe

41 10109113

D3564-13



Manufactured No

200

Each

31.0000

1

1

Wearshoe

41 10109113

D3564-9



Manufactured No

200

Each

24.0000

1

1

Wearshoe

41 10109113

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>	
FP019	8	B 60302	<u>x1</u>
	8		
59941			
FP17	31		<u>x1</u>
	19		
	12		
59660			
60862			
FP	1		
55334	1		
FP019	23		
59201	10		
60236	13		<u>y1</u>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Friday, August 06, 2010 12:37:53 PM

Page 6

Work Order ID: 61113



Parent Item: D205-634-041



Parent Item Name: Replacement Skidtube

Start Date: 8/6/2010

Required Date: 8/20/2010

Start Qty: 1.00

Required Qty: 1.00

D3564-5



Manufactured No

200

Each

27.0000

1

1



Wearshoe

41 10/09/13

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FG	1	
----	---	--

34806	1	
-------	---	--

FP19	2	
------	---	--

57525	1	
-------	---	--

58709	1	
-------	---	--

FP-19	24	
-------	----	--

59157	11	
-------	----	--

60868	13	
-------	----	--

D2594-3



Manufactured No

200

Each

379.0000

16

16



O-Ring, 205 Skidtube

41 10/09/13

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP	379	346114
----	-----	--------

55546	19	
-------	----	--

58191	12	
-------	----	--

59358	348	
-------	-----	--

D2594-1



Manufactured No

200

Each

419.0000

16

16



Plug, 205 Skidtube

41 10/09/13

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP	183	
----	-----	--

42807	112	
-------	-----	--

55002	71	
-------	----	--

FP14	236	
------	-----	--

58434	47	
-------	----	--

59110	189	
-------	-----	--

41 10/09/13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN <i>#</i>	DRAWN BY <i>PH</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. D2580	REV. D SHEET 1 OF 3
DATE 07.02.27		TITLE 205 SKIDTUBE ASSEMBLY	SCALE NTS

RELEASED
07.06.28 *#*

QTY -041	QTY -045	Part Number	Description
X		D2580-041	SKIDTUBE ASSEMBLY
	X	D2580-045	SKIDTUBE ASSEMBLY
1	1	D2500-1-190	EXTRUSION
1	1	D2576-3	STEP
20	24	D2579	CROSS BOLT SPACER
16	16	D2594-1	PLUG
16	16	D2594-3	O-RING
1	1	D2596	205 WEB
1	1	D2855	AFT CAP
1	1	D3564-5	WEARSHOE
1	1	D3564-9	WEARSHOE
1	1	D3564-11	WEARSHOE
1	1	D3564-13	WEARSHOE
2	2	D3566-1	GASKET
1	1	D3566-5	GASKET
1	1	D3566-13	GASKET
50	50	ALS7-1032-130 or AKS7-1032-130 or AKS4-1032-130 or AEELS-1032-130	INSERT
50	50	AN3C4A	BOLT
2	2	AN3-5A	BOLT
50	50	AN960C10L	WASHER
2	2	AN960JD10L	WASHER

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. *2113*

GENERAL NOTES:

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) ALL DIMENSIONS ARE IN INCHES
- 3) INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- 4) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 5) USE DART DRILL TEMPLATE TD2577-205 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTION D-D (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND AN960C10L WASHERS WITH SIKAFLEX-241/-291.
- 6) WELDING TO BE DONE PER DART QSI 004.
- 7) FINISH:
SEE NOTES ON
PAGE 2 FOR D2580-041 AND
PAGE 3 FOR D2580-045
- 8) INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES).

Copyright © 1996 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

NO. 238

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 61353
Part number: D205-634.041
Description: 205 skid tube
Welding Process: Tig[] Mig[]
Base materiel: Aluminium
Current: AC[] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[] fail[]
Penetration: pass[] fail[]

UNACCEPTABLE

Cracks: pass[] fail[]
Undercut: pass[] fail[]
Pin holes: pass[] fail[]
Overlap (cold lap) pass[] fail[]
Porosity (surface): pass[] fail[]
Coloration: pass[] fail[]

Qualifier Barclay Elliott Date of Test Coupon 10.08.25

Welder Barclay Elliott Date of Test Coupon 10.08.25

The above named individual is qualified in accordance with AWS D17.1.2001 to weld